

IN THE CLAIMS

Please amend the following claims which are pending in the present application:

What is claimed:

1. (Currently Amended) An electronic assembly comprising:

a substrate;

a support plate; and

a plurality of support members, each having a first portion attached to the substrate and second portion attached to the ~~thermally conductive body~~ support plate, the support ~~member~~ members being thermally separated from the support plate.

2. (Currently amended) The electronic assembly of claim 1, further comprising

an plurality of insulating bodies interconnecting the support plate and the support members.

3. (Currently amended) The electronic assembly of claim 2, wherein the

insulating bodies ~~is~~ are formed on the support plate.

4. (Currently amended) The electronic assembly of ~~claim 3~~ claim 2, wherein the insulating bodies ~~is~~ are in a plurality of recesses on the support plate.
5. (Currently amended) The electronic assembly of ~~claim 4~~ claim 2, wherein the second portion of each of the support member members is embedded in the a respective one of the insulating bodies.
6. (Currently amended) The electronic assembly of ~~claim 5~~ claim 2, wherein the insulating bodies ~~is~~ are at least one of a ceramic and a liquid crystal polymer.
7. (Currently amended) The electronic assembly of ~~claim 6~~ claim 1, wherein the substrate is a circuit board.
8. (Currently amended) The electronic assembly of ~~claim 7~~ claim 1, wherein the support plate is metal.
9. (Currently amended) The electronic assembly of ~~claim 8~~ claim 1, wherein the support plate is a heat sink.
10. (Currently amended) The electronic assembly of ~~claim 9~~ claim 1, wherein the substrate is a circuit board and the support plate is a heat sink, the electronic assembly further comprising a package substrate attached to the circuit board and a

microelectronic die mounted on the package substrate, the heat sink being thermally connected to the microelectronic die.

11. (Original) The electronic assembly of claim 10, wherein the heat sink is on a side of the package substrate opposing the circuit board.

12. (Currently amended) The electronic assembly of ~~claim 11~~, claim 10, wherein the package substrate includes a plurality of contact formations on a bottom surface thereof, the contact formations interconnecting the package substrate and the circuit board.

13. (Currently amended) The electronic assembly of ~~claim 2~~ claim 10, wherein the microelectronic die is a microprocessor.

14. (Currently amended) The electronic assembly of ~~claim 3~~ claim 10, further comprising a thermal interface material interconnecting the microelectronic die and the heat sink.

15. (Original) An electronic assembly comprising:
a circuit board;
a package substrate attached to the circuit board;
a microelectronic die mounted to the package substrate;

a thermally conductive plate thermally connected to the microelectronic die;
a plurality of insulating bodies attached to the thermally conductive plate;
and
a plurality of support members having first and second portions, the first portions attached to the circuit board, the second portions attached to the insulating bodies.

16. (Original) The electronic assembly of claim 15, further comprising solder between the circuit board and the package substrate and between the circuit board and the support members and wherein the support members are thermally separated from the conductive plate such that when the circuit board is heated to a temperature to reflow the solder between the circuit board and the package substrate, a sufficient amount of heat remains in the support members to reflow the solder between the support members and the circuit board.

17. (Currently amended) The electronic assembly of ~~claim 6~~ claim 15, wherein the support members are metal pins.

18. (Original) The electronic assembly of claim 17, wherein the metal pins are soldered to the circuit board.

19. (Currently amended) The electronic assembly of ~~claim 8~~ claim 15, wherein the circuit board is a motherboard.
20. (Currently amended) The electronic assembly of ~~claim 9~~ claim 15, wherein the microelectronic die is a microprocessor.
21. (Currently amended) The electronic assembly of ~~claim 20~~ claim 15, wherein the thermally conductive plate is a heat sink.
22. (Original) The electronic assembly of claim 21, wherein the heat sink is over the package substrate.
23. (Currently amended) The electronic assembly of ~~claim 22~~ claim 15, further comprising a thermal interface material interconnecting the ~~heat sink~~ thermally conductive plate and the microelectronic die.
24. (Original) A method for constructing an electronic assembly comprising:
interconnecting a thermally conductive plate and a support member with an insulating body; and
mounting the support member to a substrate to thermally connect the thermally conductive plate to a microelectronic die on the substrate.

25. (Original) The method of claim 24, further comprising forming the insulating body on the thermally conductive plate.

26. (Currently amended) The method of ~~claim 25~~ claim 24, further comprising depositing wave solder between the support member and the ~~circuit board~~ substrate.

27. (Currently amended) The method of claim 26, further comprising heating the substrate, said heating attaching the solder to the substrate and the ~~circuit board~~ support member.

28. (Original) A method for constructing an electronic assembly comprising:
mounting a microelectronic die to a package substrate;
placing the package substrate on a circuit board;
placing a heat sink on the circuit board; and
heating the circuit board to attach both the package substrate and the heat sink to the circuit board substantially simultaneously and thermally connect the heat sink to the microelectronic die.

29. (Currently amended) The method of claim 28, further comprising depositing solder between the circuit board and the package substrate and between the circuit

board and the heat sink, said heating ~~attaching~~ to attach the package substrate and the heat sink to the circuit board by reflowing the solder.

30. (Currently amended) The method of ~~claim 29~~ claim 28, wherein placing the heat sink on the circuit board comprises ~~further comprising~~ forming an insulating body on the heat sink to thermally separate the heat sink from the ~~solder~~ circuit board.


Applicant respectfully submits that the present application is in condition for allowance. If the Examiner believes a telephone conference would expedite or assist in the allowance of the present application, the Examiner is invited to call Michael A. Bernadicou at (408) 720-8300.

Please charge any shortages and credit any overages to Deposit Account No. 02-2666. Any necessary extension of time for response not already requested is hereby requested. Please charge any corresponding fee to Deposit Account No. 02-2666.

Respectfully submitted,

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